



Stafford County Virginia

Comprehensive Plan 2016-2036



Prepared by the Planning Commission on April 27, 2016
Adopted by the Board of Supervisors on August 16, 2016

Acknowledgements

Board of Supervisors

Robert Thomas, Chairman
Laura Sellers, Vice Chairman
Meg Bohmke
Jack Cavalier
Wendy Maurer
Paul Milde III
Gary Snellings

Planning Commission

Steven Apicella, Chairman
Thomas Coen, Vice Chairman
Sherry Bailey, Secretary
Roy Boswell
Darrell English
Michael Rhodes
Crystal Vanuch

Stafford County Administration

Anthony Romanello, County Administrator
Keith Dayton, Deputy County Administrator
Timothy J. Baroody, Deputy County Administrator

Stafford County Department of Planning and Zoning

Jeff Harvey, Director
Kathy Baker, Assistant Director
Michael Zuraf, Principal Planner

Stafford County GIS Office

Dave Capaz, GIS Manager
Brad Fetzer, GIS Specialist
Jacqueline Nova, GIS Analyst
Matt Rowe, Senior GIS Analyst

Table of Contents

Resolution R16-175 – Plan Adoption (August 16, 2016)

Amendments:

Resolution R17-52 – Special Overlay Zoning Districts / ICTP (February 7, 2017)

<u>Chapter</u>		<u>Page Number</u>
1.0	INTRODUCTION.....	1-1
1.1	BACKGROUND	1-2
1.2	PURPOSE OF THE PLAN	1-2
1.3	FORMAT OF THE PLAN	1-3
1.4	RELATIONSHIP TO OTHER PLAN ELEMENTS	1-4
1.5	LEGAL BASIS FOR THE PLAN	1-5
1.6	HISTORY OF THE COMPREHENSIVE PLAN IN STAFFORD COUNTY.....	1-7
1.7	PREPARATION OF THE PLAN	1-8
1.8	USE OF THE PLAN	1-11
2.0	THE FOUNDATION FOR THE FUTURE.....	2-1
2.1	INTRODUCTION	2-1
2.2	GOALS, OBJECTIVES AND POLICIES	2-1
	SUSTAINABILITY	2-2
	FISCAL RESPONSIBILITY	2-9
	ENVIRONMENT	2-12
	HEALTH, SAFETY AND WELFARE.....	2-18
	HOUSING	2-24
	TRANSPORTATION	2-26
	ECONOMIC DEVELOPMENT	2-30
	EDUCATION	2-32
	HERITAGE RESOURCES	2-33
2.3	IMPLEMENTATION	2-34
3.0	THE LAND USE PLAN.....	3-1
3.1	OVERVIEW	3-1
3.2	BASIS FOR THE PLAN.....	3-3
3.3	KEY FEATURES OF THE PLAN.....	3-3
3.3.1	GROWTH MANAGEMENT AND URBAN SERVICES AREA.....	3-3
3.3.2	PLANNING AREAS	3-6
3.4	MILITARY FACILITY IMPACTS	3-8
3.5	AIRPORT COMPATIBILITY	3-15
3.6	FUTURE LAND USE RECOMMENDATIONS.....	3-21
3.7	LAND USE MAP GROWTH PROJECTIONS	3-101
3.8	TRANSFER OF DEVELOPMENT RIGHTS.....	3-105
4.0	TRANSPORTATION PLAN	4-1
4.1	INTRODUCTION	4-1
4.2	EXISTING AND FUTURE CONDITIONS	4-2
4.3	TRANSPORTATION COORDINATION	4-3

4.4	MULTI-MODAL TRANSPORTATION FACILITIES.....	4-4
4.4.1	CAR POOL AND VAN POOL	4-4
4.4.2	PARK AND RIDE LOTS.....	4-4
4.4.3	BUS4-5	
4.4.4	COMMUTER RAIL	4-5
4.4.5	TELECOMMUTING	4-6
4.4.6	STAFFORD REGIONAL AIRPORT.....	4-6
4.4.7	BICYCLE AND PEDESTRIAN FACILITIES	4-7
4.5	TRANSPORTATION DEMAND MANAGEMENT	4-7
4.6	LEVEL OF SERVICE	4-8
4.7	RIGHT-OF-WAY REQUIREMENTS	4-9
4.8	ACCESS MANAGEMENT.....	4-9
4.9	VDOT SECONDARY STREET ACCEPTANCE REQUIREMENTS.....	4-10
4.10	ROAD IMPROVEMENT PROJECTS IN APPROVED PROGRAMS.....	4-11
4.11	NEW TRANSPORTATION IMPROVEMENTS	4-11
4.12	FUNDING SOURCES.....	4-12
4.12.1	TRANSPORTATION IMPACT FEES.....	4-12
4.12.2	TRANSPORTATION SERVICE DISTRICTS.....	4-14
4.12.3	2% FUEL SALES TAX.....	4-14
5.0	THE PUBLIC COSTS OF GROWTH AND DEVELOPMENT	5-1
5.1	INTRODUCTION	5-1
5.2	LEVEL OF SERVICE STANDARDS.....	5-2
5.2.1	AUTHORITY AND BACKGROUND	5-2
5.2.2	DEFINITION	5-2
5.2.3	PURPOSE AND INTENT.....	5-2
5.2.4	BENEFITS	5-3
5.2.5	FACILITIES.....	5-3
5.2.5.1	SCHOOLS.....	5-3
5.2.5.2	PARKS AND RECREATION	5-5
5.2.5.3	LIBRARIES.....	5-5
5.2.5.4	FIRE AND RESCUE.....	5-6
5.2.5.5	LAW ENFORCEMENT.....	5-7
5.2.5.6	WATER UTILITIES.....	5-8
5.2.5.7	WASTEWATER UTILITIES	5-10
5.2.5.8	SOLID WASTE MANAGEMENT	5-11
5.2.5.9	TRANSPORTATION	5-12
5.2.5.10	STORMWATER FACILITIES.....	5-12
5.3	CAPITAL COSTS PER RESIDENTIAL UNIT.....	5-13
5.3.1	INTRODUCTION	5-13
5.3.2	PROFFERS	5-13
5.3.3	TRANSPORTATION IMPACT FEES.....	5-14
5.3.4	PAYMENTS FOR UPGRADING IMPOUNDING STRUCTURES (DAMS)	5-14
5.4	PUBLIC FACILITIES PLAN	5-16
5.4.1	GOAL OF THE PLAN	5-16
5.4.2	BACKGROUND	5-16
5.4.3	PURPOSE AND SCOPE.....	5-16
5.4.4	KEY OBJECTIVES	5-17
5.5	FINANCIAL IMPACT MODEL	5-18

6.0	THE PEOPLE AND THE PLACE.....	6-1
6.1	LAND USE	6-1
6.1.1	CURRENT LAND USE	6-3
6.1.2	ZONING REGULATIONS	6-5
6.1.3	FUTURE BUILDOUT UNDER EXISTING ZONING	6-11
6.1.4	FINDINGS	6-13
6.2	POPULATION	6-14
6.2.1	HISTORICAL TRENDS.....	6-14
6.2.2	COMPOSITION.....	6-19
6.2.3	FINDINGS	6-20
6.3	HOUSING.....	6-21
6.3.1	HOUSING AVAILABILITY	6-21
6.3.2	VALUE AND RENT	6-23
6.3.3	FINDINGS	6-25
6.4	ECONOMY.....	6-26
6.4.1	LABOR FORCE.....	6-26
6.4.2	AT-PLACE EMPLOYMENT	6-27
6.4.3	RESIDENT INCOME	6-29
6.4.4	BUSINESS ACTIVITY.....	6-30
6.4.5	MARINE CORPS BASE QUANTICO.....	6-31
6.4.6	AGRICULTURE.....	6-32
6.4.7	COMPREHENSIVE ECONOMIC STRATEGIC PLAN	6-32
6.4.8	FINDINGS	6-33
6.5	HISTORIC AND CULTURAL RESOURCES	6-34
6.5.1	A BRIEF HISTORY OF STAFFORD COUNTY	6-34
6.5.2	KNOWN HERITAGE RESOURCES	6-36
6.5.3	STAFFORD COUNTY CULTURAL RESOURCE INVENTORY	6-37
6.5.4	SIGNIFICANT CULTURAL RESOURCES.....	6-37
6.5.5	FINDINGS	6-39
6.6	COMMUNITY FACILITIES.....	6-41
6.6.1	PUBLIC SCHOOLS.....	6-41
6.6.2	LAW ENFORCEMENT	6-44
6.6.3	CORRECTIONAL FACILITIES.....	6-45
6.6.4	FIRE AND RESCUE	6-45
6.6.5	HOSPITALS	6-46
6.6.6	LIBRARIES	6-48
6.6.7	SOLID WASTE	6-48
6.6.8	VIRGINIA COOPERATIVE EXTENSION	6-48
6.6.9	RAPPAHANNOCK AREA COMMUNITY SERVICES	6-48
6.6.10	FINDINGS	6-49
6.7	INFRASTRUCTURE	6-50
6.7.1	WATER AND SEWER.....	6-50
6.7.2	STORMWATER MANAGEMENT.....	6-52
6.7.3	NATURAL GAS.....	6-53
6.7.4	ELECTRIC	6-53
6.7.5	TELECOMMUNICATIONS.....	6-53
6.7.6	FINDINGS	6-53
6.8	PARKS AND RECREATION.....	6-55
6.8.1	NATIONAL PARKS	6-59

6.8.2	OTHER RECREATIONAL FACILITIES	6-59
6.8.3	FUTURE PARK FACILITIES.....	6-59
6.8.4	POTOMAC HERITAGE SCENIC TRAIL	6-59
6.8.5	PARKS ANALYSIS.....	6-60
6.8.6	FINDINGS	6-60
6.9	NATURAL RESOURCES	6-61
6.9.1	LAND RESOURCES	6-61
6.9.2	WATER RESOURCES	6-65
6.9.3	FLOODPLAIN.....	6-70
6.9.4	DAM INUNDATION ZONES	6-70
6.9.5	WETLANDS.....	6-73
6.9.6	GROUNDWATER.....	6-73
6.9.7	FOREST AND WILDLIFE RESOURCES.....	6-74
6.9.8	FINDINGS	6-74
6.10	TRANSPORTATION	6-79
6.10.1	ROAD NETWORK.....	6-79
6.10.2	ROADWAY JURISDICTION	6-81
6.10.3	TRAFFIC VOLUME	6-81
6.10.4	TRAFFIC SAFETY	6-81
6.10.5	BUS SERVICE	6-81
6.10.6	RAIL SERVICE	6-81
6.10.7	COMMUTER LOTS.....	6-83
6.10.8	AIR SERVICE	6-83
6.10.9	BICYCLE AND PEDESTRIAN FACILITIES	6-83
6.10.10	FINDINGS	6-83
7.0	IMPLEMENTATION PLAN	7-1
A.	ACTION LIST	7-1
B.	ACTION LIST TIMELINE	7-8
C.	MONITORING AND TRACKING	7-16
APPENDIX		
A.	METHODOLOGY FOR CALCULATING CAPITAL COSTS	A-1
B.	PUBLIC FACILITIES PLAN	B-1
C.	DELETED	
D.	TGA COUNTYWIDE ACREAGE NEEDS	D-1
E.	AFFORDABLE HOUSING STUDY.....	E-1
F.	PUBLIC INPUT SUMMARY.....	F-1
G.	TRANSPORTATION PLAN BACKGROUND.....	G-1
H.	STAFFORD REGIONAL AIRPORT LAND USE COMPATIBILITY STUDY.....	H-1
LIST OF FIGURES		
3.1	URBAN SERVICES AREA	3-2
3.2	ROCK HILL SEWER SERVICE AREA	3-4
3.3	HARTWOOD WATER SERVICE AREA.....	3-5
3.4A	MCB QUANTICO MILITARY INFLUENCE AREA ZONES	3-11
3.4B	MCB QUANTICO MILITARY INFLUENCE AREA	3-12
3.4C	DAY-NIGHT AVERAGE NOISE LEVELS - HEAVY WEAPONS TRAINING AREAS.....	3-13
3.5	AIRPORT LAND USE COMPATIBILITY ZONES.....	3-16

3.6	FUTURE LAND USE.....	3-22
3.7.1-A	COURTHOUSE PLANNING AREA.....	3-31
3.7.2-A	COURTHOUSE PLANNING AREA LAND USE CONCEPT.....	3-32
3.7.3-A	LAND USE PLAN FROM COURTHOUSE SMALL AREA PLAN.....	3-34
3.7.4-A	COURTHOUSE PLANNING AREA - AIRPORT IMPACT ZONES.....	3-36
3.7.1-B	CENTRAL STAFFORD BUSINESS AREA.....	3-40
3.7.2-B	CENTRAL STAFFORD BUSINESS PLANNING AREA LAND USE CONCEPT PLAN	3-42
3.7.3-B	CENTRAL STAFFORD BUSINESS AREA WITH AIRCRAFT TRAFFIC PATTERN	3-44
3.7.4-B	CENTRAL STAFFORD BUSINESS AREA WITH AIRPORT IMPACT ZONES.....	3-45
3.7.1-C	WARRENTON ROAD PLANNING AREA.....	3-51
3.7.2-C	WARRENTON ROAD PLANNING AREA LAND USE CONCEPT.....	3-52
3.7.1-D	LEELAND TOWN STATION PLANNING AREA.....	3-56
3.7.2-D	LEELAND TOWN STATION PLANNING AREA LAND USE CONCEPT	3-57
3.7.1-E	BROOKE STATION PLANNING AREA	3-60
3.7.2-E	BROOKE STATION PLANNING AREA LAND USE CONCEPT	3-61
3.7.1-F	BOSWELLS CORNER PLANNING AREA.....	3-64
3.7.2-F	BOSWELLS CORNER PLANNING AREA LAND USE CONCEPT.....	3-66
3.7.1-G	AQUIA TOWN CENTER PLANNING AREA.....	3-67
3.7.2-G	Aquia Town Center Planning Area Land Use Concept.....	3-68
3.7.1-H	FALMOUTH VILLAGE PLANNING AREA.....	3-70
3.7.2-H	Historic Falmouth Village Planning Area Land Use Concept.....	3-72
3.7.1-I	MARINA DISTRICT PLANNING AREA	3-74
3.7.2-I	MARINA DISTRICT PLANNING AREA LAND USE CONCEPT	3-75
3.7.1-J	Potomac Landing Planning Area.....	3-76
3.7.2-J	Potomac Landing Planning Area Land Use Concept.....	3-77
3.7.1-K	Old Banks Recreation Planning Area.....	3-78
3.7.2-K	Old Banks Recreation Planning Area Land Use Concept.....	3-79
3.7.1-L	Rappahannock Recreation Planning Area.....	3-80
3.7.2-L	Rappahannock Recreation Planning Area Land Use Concept.....	3-81
3.7.1-M	Widewater Planning Area.....	3-82
3.7.2-M	Widewater Planning Area Land Use Concept.....	3-83
3.7.4.S1	Suburban Land Use Within the Airport Impact Zones	3-90
3.7.4.S2	SUBURBAN LAND USE WITHIN AIRPORT IMPACT ZONES	3-91
3.7.4.AR1	AGRICULTURAL & RURAL LAND USE WITHIN AIRPORT IMPACT ZONES	3-95
3.7.4.AR2	AGRICULTURAL & RURAL LAND USE WITHIN AIRPORT IMPACT ZONES	3-96
3.8	TRANSFER OF DEVELOPMENT RIGHTS.....	3-106
4.1	ANTICIPATED TRANSPORTATION NEEDS.....	4-15
4.2	ROAD IMPROVEMENT PROJECTS IN APPROVED FUNDING PROGRAMS	4-16
4.3	PROPOSED TRANSPORTATION IMPROVEMENTS.....	4-19
4.4	TRANSPORTATION IMPACT FEE AREAS.....	4-21
6.1	EXISTING LAND USE.....	6-2
6.2	ZONING	6-6
6.3	POPULATION DENSITY	6-18
6.4	CULTURAL RESOURCES.....	6-40
6.5	SCHOOLS	6-43
6.6	COMMUNITY FACILITIES	6-47
6.7	INFRASTRUCTURE	6-51
6.8	MAJOR ELECTRIC AND GAS LINES.....	6-54
6.9	PARKS AND RECREATIONAL FACILITIES.....	6-57
6.10	NATURAL RESOURCES	6-63

6.11	WATERSHEDS.....	6-67
6.12	DAM INUNDATION ZONES.....	6-72
6.13	GEOLOGICAL ZONES	6-76
6.14A	MINERAL RESOURCES	6-77
6.14B	MINERAL RESOURCES LEGEND	6-78
6.15	STREET NETWORK AND CLASSIFICATION.....	6-80
6.16	TRANSPORTATION	6-82
6.17	AIRPORT IMPACT ZONES	6-84

LIST OF TABLES.....

3.1	MILITARY INFLUENCE AREA SUGGESTED LAND USE COMPATIBILITY	3-14
3.2	CONSOLIDATED LAND USE COMPATIBILITY MATRIX	3-19
3.3	TGA DEVELOPMENT SUMMARY	3-25
3.4	LAND USE MAP GROWTH PROJECTIONS	3-102
4.1	ROAD IMPROVEMENT PROJECTS IN APPROVED PROGRAMS.....	4-17
4.2	PROPOSED TRANSPORTATION IMPROVEMENTS.....	4-20
5.1	SUMMARY OF CAPITAL COSTS BY RESIDENTIAL UNIT TYPE.....	5-13
6.1	STAFFORD COUNTY LAND USE - 2016	6-3
6.2	EXISTING ZONING DISTRICTS	6-7
6.3	FUTURE BUILDOUT UNDER EXISTING ZONING (INSIDE THE USA)	6-12
6.4	FUTURE BUILDOUT UNDER EXISTING ZONING (RURAL AREAS).....	6-13
6.5	POPULATION CHANGE (1950 – 2010)	6-14
6.6	POPULATION ESTIMATES AND PROJECTIONS.....	6-15
6.7	COUNTY BASED POPULATION PROJECTIONS.....	6-16
6.8	COUNTY RESIDENTIAL OCCUPANCY PERMIT PROJECTION	6-17
6.9	POPULATION CHARACTERISTICS - 2000	6-19
6.10	ANNUAL HOUSING UNIT TRENDS (1990 – 2015)	6-21
6.11	UNITS IN STRUCTURE - 2000	6-22
6.12	PERMIT ACTIVITY (2000 – 2015)	6-23
6.13	HOUSING VALUE AND MEDIAN RENT - 2010	6-24
6.14	LABOR FORCE CHARACTERISTICS - 2013	6-26
6.15	UNEMPLOYMENT RATE (2005-2014)	6-27
6.16	INDUSTRIES OF EMPLOYMENT - 2010.....	6-28
6.17	OCCUPATIONS - 2010	6-29
6.18	INCOME CHARACTERISTICS - 2010	6-30
6.19	MAJOR PRIVATE SECTOR EMPLOYERS - 2010.....	6-31
6.20	SIGNIFICANT HERITAGE RESOURCES	6-38
6.21	STAFFORD COUNTY PUBLIC SCHOOLS.....	6-41
6.22	FIRE AND RESCUE STATIONS.....	6-46
6.23	FACILITIES MANAGED BY THE DEPARTMENT OF PARKS AND RECREATION.....	6-56
6.24	SCHOOL BOARD OWNED RECREATIONAL FACILITIES.....	6-58
6.25	SOIL DRAINAGE CAPACITY.....	6-64
6.26	SOIL ERODIBILITY	6-64
6.27	LAND USE SUITABILITY	6-65
6.28	STAFFORD WATERSHED SYSTEM	6-68
6.29	MAJOR WATERSHEDS.....	6-69
6.30	REGULATED DAMS IN STAFFORD COUNTY	6-71

